GV Ethernet Tally Receiver User's Guide

Date	Revision	Description	Author
11/14/2012	.1	Initial revision	Dan Burnash
08/18/2014	1.0	Updated for Tally Receiver v1.3.0.0, to go with new K-Frame v7.0.0 features	Dan Burnash
05/02/2018	1.1	Updated for 4 suites	Nick Smith

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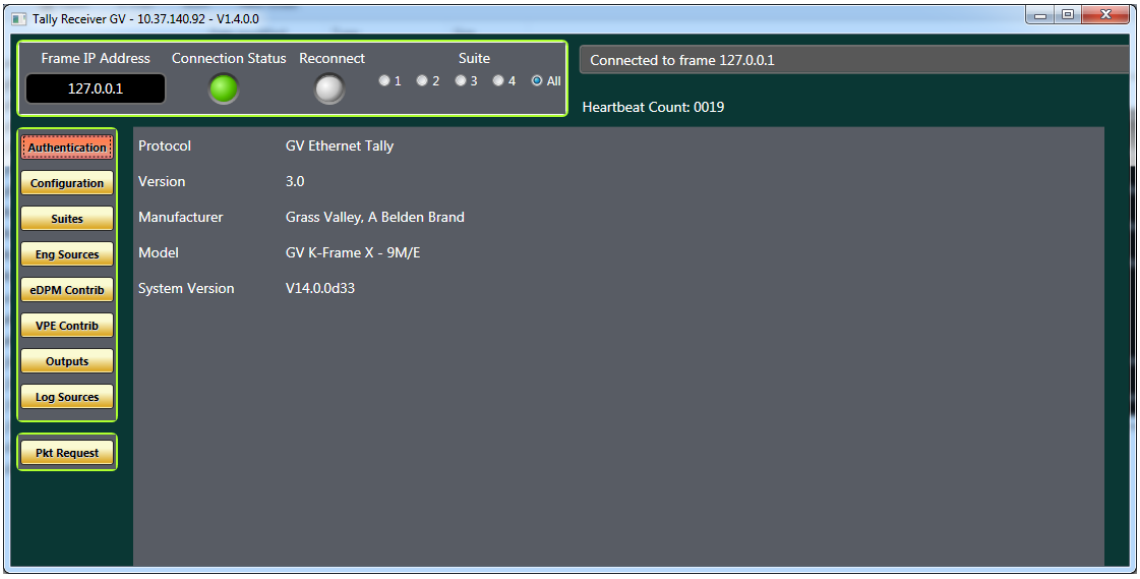
1 Ethernet Tally Receiver Overview

The Ethernet Tally Receiver application is designed to display tally data transmitted from a K-Frame or K-Frame simulator to a connected tally client. The receiver provides an interface for establishing a connection, which initiates the transfer of tally packets to the receiver. Once the connection is established, the receiver displays the data received and updates that data in real time as relevant changes are made on the K-Frame. Additionally, the Tally Receiver supports sending packets to the K-Frame to request either additional information or modification of specific values in the K-Frame.

2 Establishing a connection

The tally receiver displays connection information in a box near the top, and allows input of a K-Frame IP Address. By clicking in the ip address area, an ipaddress may be typed in. To connect to a K-Frame simulator running on the same pc, use ip address 127.0.0.1. If connecting to a remote K-Frame, use the ip address of the K-Frame system. When enter is pressed, the receiver will attempt to connect to the K-Frame at that ip address.



Once a valid ipaddress is set in the Frame IP Address window, the connection may be established, or terminated, by double-clicking on the Connection Status light. The light will be white when the receiver first starts up, turn green when a connection is established, and turn red when the connection is terminated. The Tally Receiver will save the ip address last used, along with some debugging settings, in the config.xml file.

The Reconnect light, when green, will cause the Tally Receiver to automatically attempt to reconnect to the current ip address whenever a connection is lost. This reconnect attempt occurs at most once every two seconds.

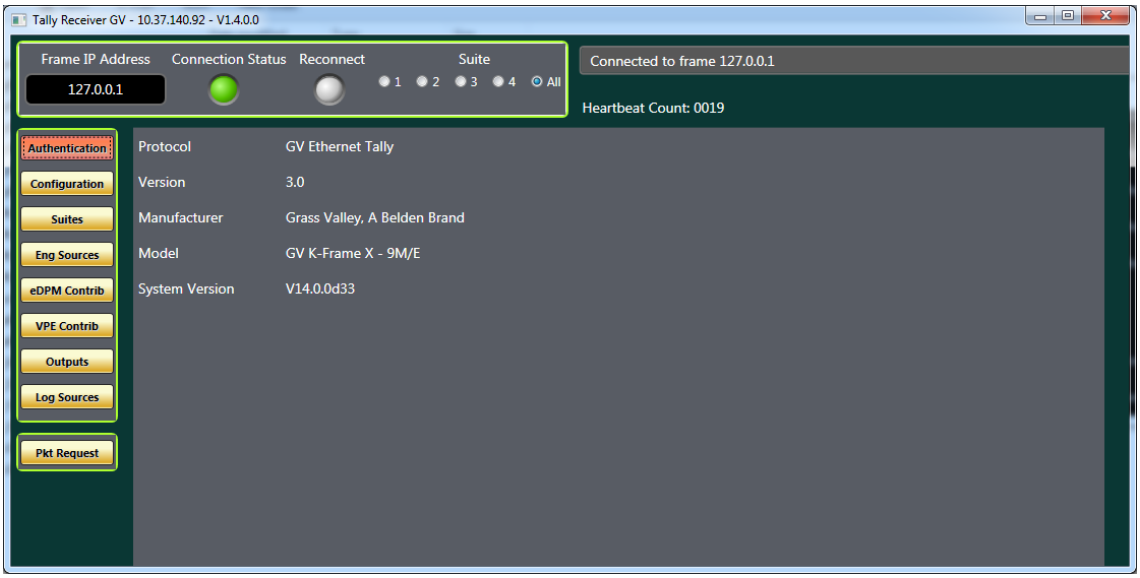
The Tally Receiver will subscribe to the suite(s) selected at the time the connection is initiated. Modifying the subscribed suites after a connection is established is done via the 'Pkt Request' selection.

3 Logging

The Tally receiver will, by default, log all packets received from the K-Frame. This file, packet.xml, is located in the c:\K-FrameLog folder on the system. This file can be very useful in tracking down tally problems, as it provides the raw xml data received from the K-Frame. If logging is not desired, it may be disabled by editing the config.xml file in the Tallyreceiver folder, and setting "packetlogging" to "False".

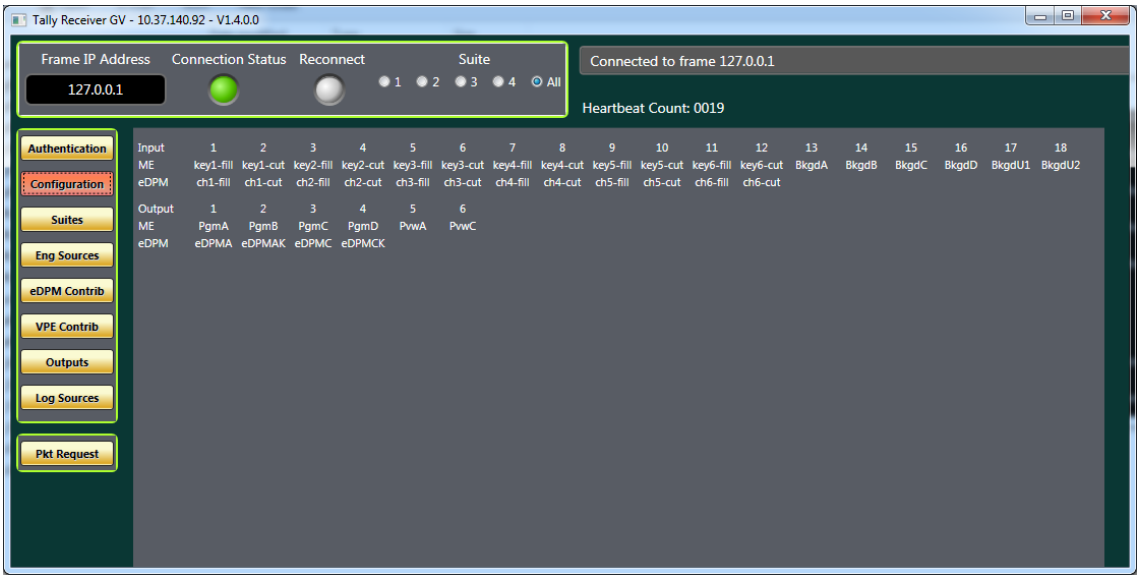
4 Authentication

The authentication button displays the authentication packet information on the protocol version and system that is currently connected.



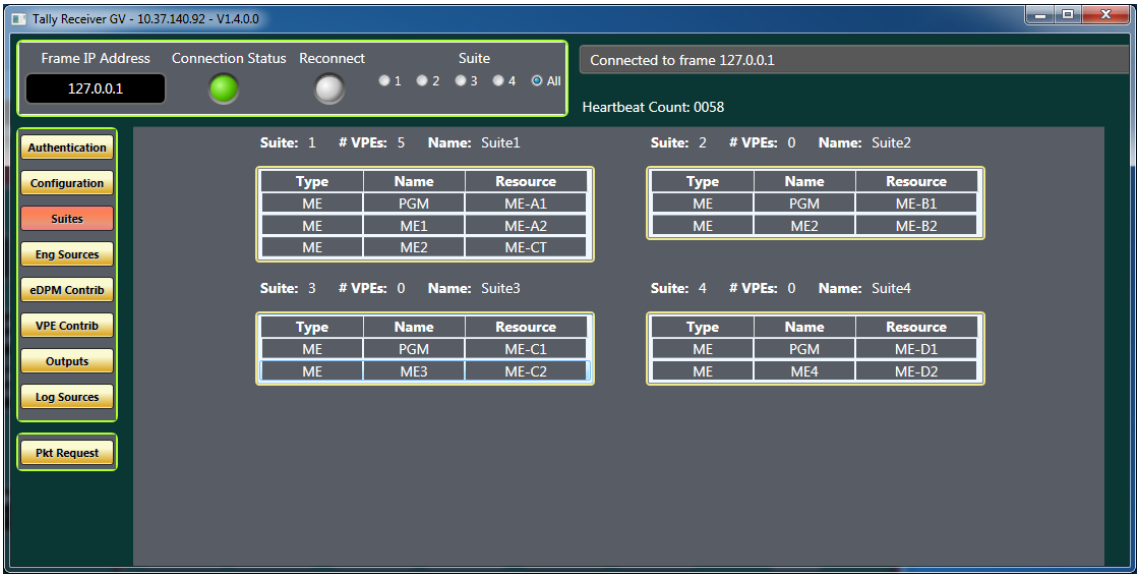
5 Configuration

The configuration button displays the inputs and outputs of each ME and each eDPM in the system.



6 Suites

The suites button displays the ME's and eDPM's that are currently acquired on the system. Tally data is only sent for acquired resources. For details on how to acquire resources, see the Ethernet Tally "GettingStarted.docx" document.



7 Engineering Sources

When selecting the Engineering sources, the range of sources to view must be selected. The "Defined" sources range from 1-300, in groups of 48, while the fixed sources range from 301-405 and are all shown when the "Fixed" button is selected.

7.1 Setting Engineering Source Names

'Source Name Control' must be enabled in the Menu, in the Tally Ports tab of the Ports & Devices menu, for name changes to be accepted by the K-Frame (See image below).

Once Source Name Control is enabled for your connection, Engineering source names may be modified by simply selecting the name field of the engineering source you would like to modify, typing in the new name, and pressing <enter>. This will send a packet to the K-Frame instructing it to change the name of that source. The packet will only be sent when <enter> is pressed. Selecting another source, or pressing <esc> will abort entry and revert the value to its original state.

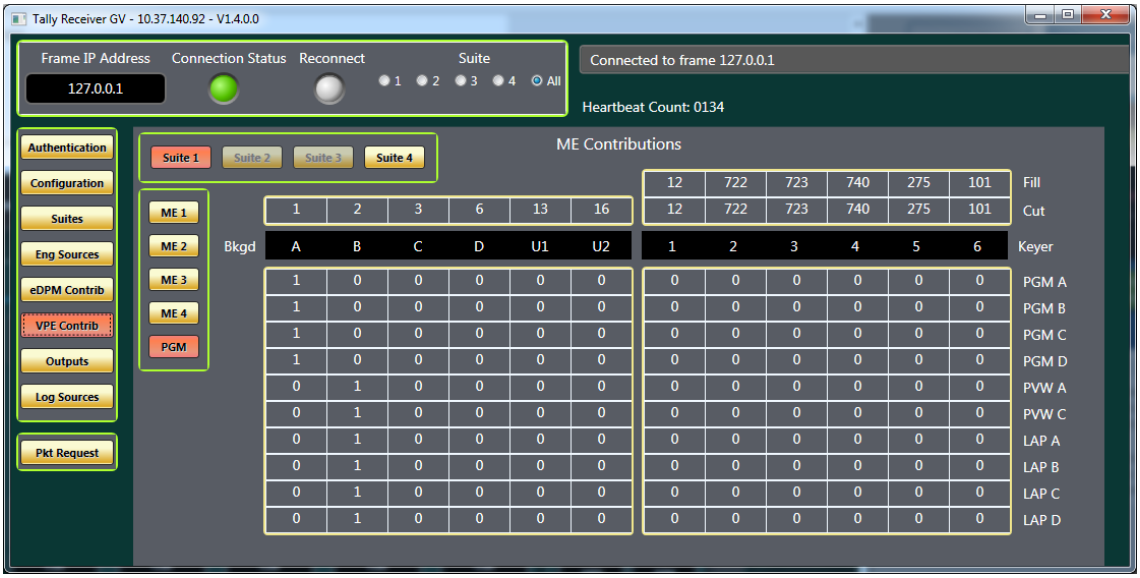
Additionally, selecting ‘From Swr’ will allow saving of all the current engineering source names in a .csv file for easy editing. Selecting ‘To Swr’ will allow loading of a csv file and sending all of the names contained within it to the K-Frame. The format of the csv file is best understood by first creating a csv file from the Tally Receiver. For Engineering sources, the .csv file contains the engineering source number, followed by a comma, and then the name of the source. Each additional source is placed on a new line. Only those sources that need to be changed need to be present in the file, as the list does not need to include all sources.

8 eDPM Contributions

The eDPM contributions are suite specific, so the suite to display must be selected. The top portion displays the logical sources connected to each input. The bottom portion shows which inputs are contributing to each of the outputs. A “1” indicates that a given input does contribute to that output. A “0” indicates that a given input does not contribute to that output.

9 VPE Contributions

The VPE contributions are also suite specific, so the correct suite to display must be selected. Additionally, the ME to display must also be selected. The top portion displays the logical sources connected to each input. The bottom portion displays which inputs are contributing to each output. A “1” indicates that a given input does contribute to that output. A “0” indicates that a given input does not contribute to that output.

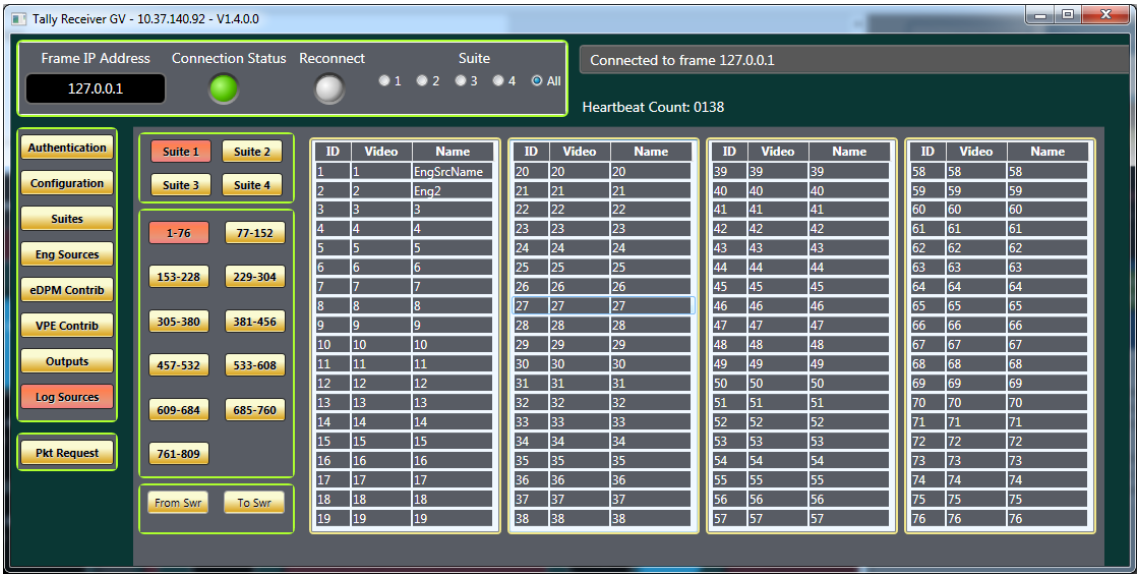


10 Outputs

There are 96 outputs, half of which may be displayed at a time. Select the button to choose which group to display. The logical source that is being sent to that BNC’s output is displayed, along with its name and suite.

11 Logical Sources

The Logical Sources are suite specific, so the correct suite to display must be selected. Only a Suite that is subscribed to should be seleceted. Additionally, the group of sources to display must be selected. To fit more sources on each screen, an abbreviated list is displayed, with only the Video source and Name for each Logical Source ID given, as shown below.



For a complete list of all of the data sent to the tally receiver for each source ID, click on header portion of a specific column of sources. The column will be expanded to take the whole window and display all data sent for that group of sources, as shown below. Clicking the header again will return the window to its original state.

11.1 Setting Logical Source Names

'Source Name Control' must be enabled in the Menu, in the Tally Ports tab of the Ports & Devices menu, for name changes to be accepted by the K-Frame (See image below).

Once Source Name Control is enabled for your connection, names may be modified by selecting the expanded view of the logical source names, selecting one of the name fields you would like to modify, typing in the new name, and pressing <enter>. This will send a packet to the K-Frame instructing it to change the name of that Logical source name. The packet will only be sent when <enter> is pressed. Selecting another source, or pressing <esc> will abort entry and revert the value to its original state.

Additionally, selecting ‘From Swr’ will allow saving of all the current logical source names in a .csv file for easy editing. Selecting ‘To Swr’ will allow loading of a csv file and sending all of the names contained within it to the K-Frame. The format of the csv file is best understood by first creating a csv file from the Tally Receiver. For logical sources, the .csv file contains the logical source ID, followed by a comma separated list of source names in the following order: Engineering source name for this logical source, Panel name, OLED name, and Menu name. Each additional logical source ID is placed on a new line. Only those sources that need to be changed need to be present in the file, as the list does not need to include all sources.

12 Packet Requests

The Ethernet Tally system supports requests for complete packets of specific types, causing the K-Frame to resend a complete packet of that type. Simply clicking on the button for the type of pkt desired, will send the request to the K-Frame. Additionally, the system supports a ‘heartbeat request’, which will send back a ‘heartbeat’ response to signify that the connection is still active. A Tally subscription packet may also be sent, modifying which suites tally data are desired to be sent to the Tally Receiver. Different versions of this packet allow adding suites, or replacing the current subscription with a completely new one. This information may be sent by specifying the suite number, or the name of a suite.